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Global Agricultural Information Network

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## Bangladesh

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### Feed the Future and the USDA Role

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**Approved By:**

Allan Mustard

**Prepared By:**

David Leishman

**Report Highlights:**

With an estimated 160 million people living in a land area that is roughly the size of Iowa, Bangladesh, is one of the world's most densely populated countries. While Bangladesh has made significant progress toward meeting its Millennium Development Goals, the country's poverty and malnutrition rates are still among the highest in South Asia. This report describes how USDA is contributing to the U.S. Feed the Future initiative to help Bangladesh implement its own food security strategy.

## General Information:

### The Food Security Challenge in Bangladesh

With an estimated 160 million people living in a land area that is roughly the size of Iowa, Bangladesh is one of the world's most densely populated countries. Current demographic trends suggest that Bangladesh's population will likely stabilize at around 220 million people by 2050. At the same time, degradation of land, water bodies, wetlands and forests presents a significant challenge to food security. Each year, approximately 80,000 hectares are lost to urban encroachment and new infrastructure development. Climate change also poses significant risks for Bangladesh. Two-thirds of the country is less than 5 meters above sea level, and 20 to 30 percent of the country's land is flooded each year. Flooding and rising sea levels have increased soil salinity, particularly in coastal areas, making it less suitable for agriculture.<sup>[i]</sup>

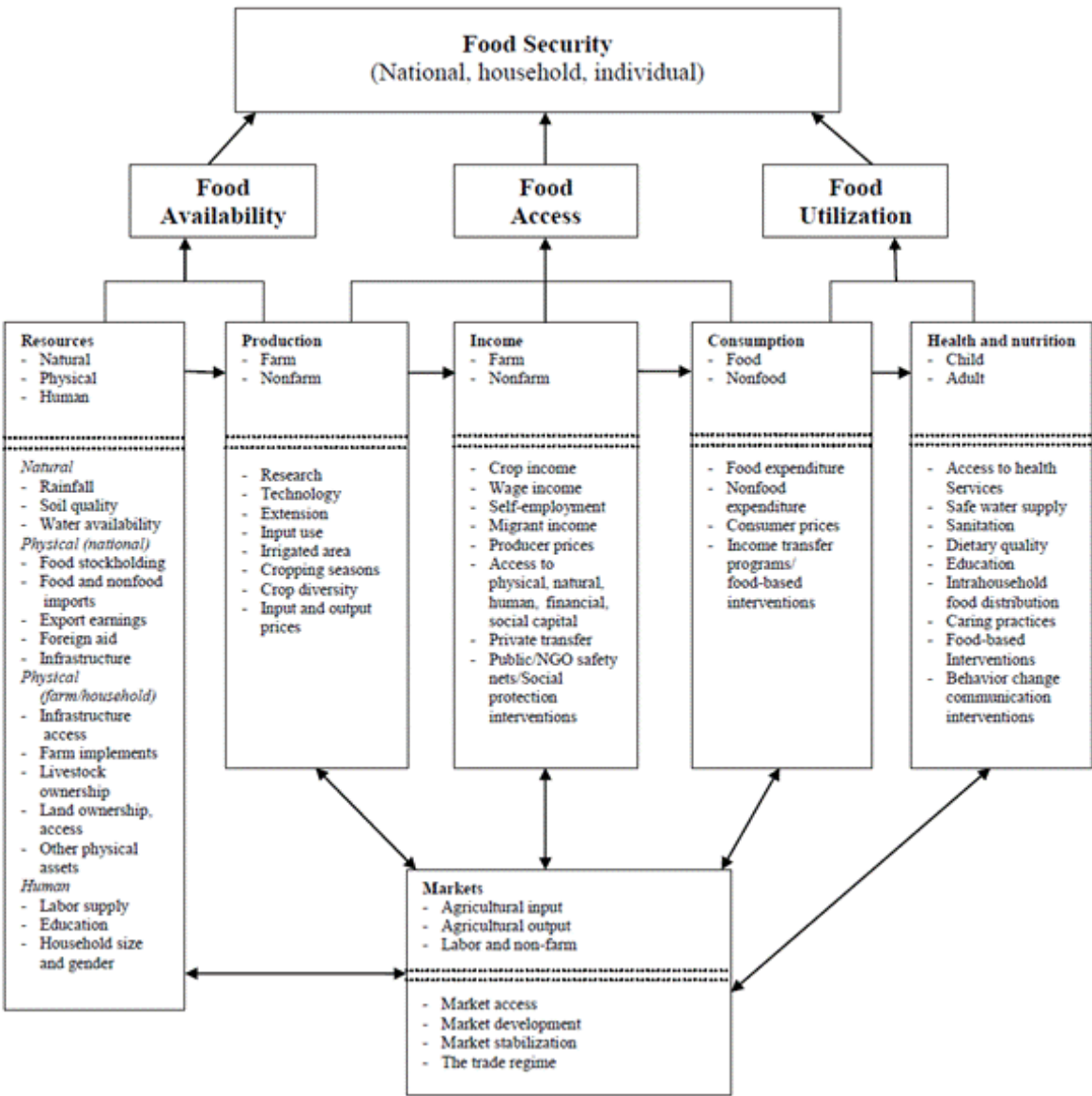
Currently more than 75 percent of Bangladesh's agricultural land (11.7 million hectares in 2013) is dedicated to rice production. Rice is the single most important food crop in Bangladesh, providing more than 170 kg per person annually, and up to 70 percent of the total human caloric intake. For many Bangladeshis, rice signifies both life and culture. The rich fertile soils of the Padma (Ganges), Jamuna (Brahmaputra) and Meghna delta region produce three and occasionally even four harvests a year. As a result, Bangladesh has achieved self-sufficiency in rice production, tripling output from 17 million tons in 1970 to over 51 million tons in 2012. While research and technological innovation have undoubtedly helped boost rice yields, population and economic growth threaten to outpace domestic food production, especially as more Bangladeshi consumers are seeking to diversify their diet with fruit, vegetables, fish, meat and dairy products.

The challenge of food security in Bangladesh is not just a matter of increasing agricultural production. Nobel laureate economist Amartya Sen has cited several examples of famines that have occurred without any substantial fall in food output (including the Bengal famine of 1943 and the Ethiopian famines of 1973), and even examples of famines that took place in years of peak food availability (such as the Bangladesh famine of 1974).

*"The possibility of the occurrence of famines or starvation or general undernourishment even in the absence of food production problems is particularly important to emphasize, since public policies and popular discussion are often geared entirely to food production problems, and this can distort policy as well as confuse prevalent debates."*<sup>[iii]</sup> (Professor Amartya Sen, Twenty-eighth McDougall Memorial Lecture, UN Food and Agriculture Organization, June 15, 2013)

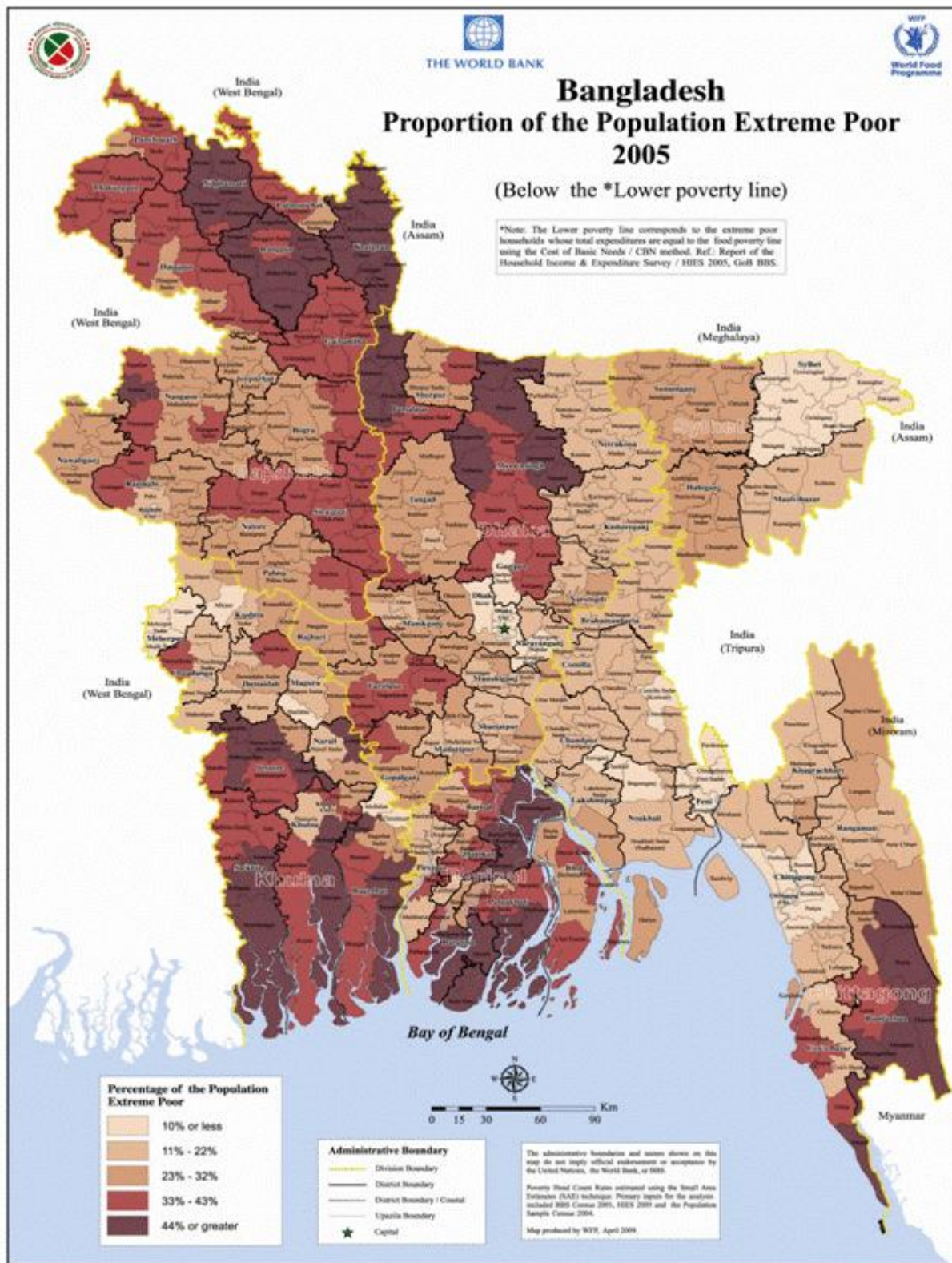
Food security is fundamentally also linked to food access and utilization (see Figure 1 below). Poverty, in particular, has been a pernicious problem in Bangladesh. Incomes vary considerably across regions, and especially between urban and rural areas. Natural boundaries created by the numerous rivers hinder the development of critical road infrastructure, and chronic energy deficiencies continue to limit economic growth. In rural Bangladesh, household income is still mostly derived from agricultural employment. During the lean seasons, March-April and October-November prior to harvest, job opportunities are few at a time when food prices are generally at their highest. This significantly affects the poorest districts in the northwest, the coastal belt, and Mymensingh, Jamalpur, Bandarban and Rangamati (see Figure 2).

Figure 1: Conceptual Framework of Food Security



Source: International Food Policy Research Institute<sup>[iii]</sup>

Figure 2: Poverty in Bangladesh



While Bangladesh has made significant progress toward meeting its [Millennium Development Goals](#),

poverty and malnutrition rates are still among the highest in South Asia. Approximately 32 percent of the population currently lives in poverty.<sup>[iv]</sup> According to the 2010 Bangladesh Bureau of Statistics (BBS) Household Income and Expenditure Survey, there are 47 million poor people in Bangladesh, of which 26 million could be defined as “extremely poor.” BBS uses two approaches to measure poverty: the direct calorie intake (DCI) method, and the cost-of-basic-needs (CBN) method. The DCI measures per capita daily caloric intake, defining poverty as less than 2,122 kcal per day, and extreme poverty as less than 1,805 kcal per day. The CBN measures the per capita expenditure required to meet basic food needs, plus an allowance for non-food consumption. The poverty line is defined by the cost of a fixed food bundle that provides the minimum nutritional per capita requirement of 2,122 kcal per day. An “upper poverty line” is also calculated by adding the cost of essential non-food items like kerosene. As prices vary across different geographic areas, poverty lines are thus also defined regionally.<sup>[v]</sup>

Poverty severely compromises health and nutritional status. Women, children, the elderly and the disabled often suffer most from inequalities in food distribution: they eat last and least. The 2009 Household Food Security and Nutrition Assessment Report estimates that almost 50 percent of Bangladeshi children under five are malnourished.<sup>[vi]</sup> Aside from the immediate impact on health, growth, and the ability to learn and carry out physical activities, under-nutrition and malnutrition have lasting generational effects. According to the 2011 Bangladesh Demographic and Health Survey, 41 percent of children under five are chronically malnourished (that is “stunted” or short for their age), and 16 percent are considered acutely malnourished (that is “wasted” or too thin for their height).<sup>[vii]</sup> The prevalence of acute malnourishment exceeding 10 percent is generally considered to be an indicator of a serious public health problem.

The nutritional status of women in Bangladesh is only slightly better. In 1997, 52 percent of women had chronic energy deficiency (CED), defined as body mass index less than 18.5 kg/m<sup>2</sup>. By 2007, the prevalence of CED among women had fallen to 30 percent. However, micronutrient malnutrition (especially vitamin A, iron, iodine and zinc deficiency) remains a significant challenge for maternal and neonatal health. Recent data indicate that 40 percent of adolescent girls, 46 percent of non-pregnant women and 39 percent of pregnant women are anemic. Helen Keller International estimates that anemia alone costs the Bangladesh economy almost 8 percent of GDP.<sup>[viii]</sup>

### **The Global Response and the Government of Bangladesh Country Investment Plan (CIP)**

In 2009, leaders of the G8 met in L’Aquila, Italy to discuss a global strategy for reducing hunger and malnutrition. The global food price spike of 2007 and 2008 had served as a poignant reminder that more than one billion people — nearly one-sixth of the world’s population — were still suffering from chronic hunger.<sup>[ix]</sup> The G8 L’Aquila Joint Statement on Global Food Security pledged support to “vulnerable countries and regions to help them develop and implement their own food security strategies, and together substantially increase sustained commitments of financial and technical assistance to invest in those strategies.” Furthermore, global leaders agreed to undertake actions “characterized by a comprehensive approach to food security, effective coordination and support for country-owned processes.” Specifically, these actions would include not only targeted emergency assistance, national safety nets and nutrition schemes, but would also seek to reduce trade distortions, improve access to information, and promote favorable business environments to encourage investment in rural infrastructure, transportation, processing, storage and irrigation. The G8 expressly invited “other countries and *private actors* to join in the common effort towards global food security through a

coherent approach.”<sup>[x]</sup>

At the G8 L'Aquila Summit, the United States pledged over \$3.5 billion for agricultural development and food security. The U.S. Feed the Future (FTF) initiative was formally launched in May 2010, with two main objectives: (1) to accelerate inclusive agricultural sector growth, and (2), to improve the nutritional status in developing countries, particularly of women and children. The FTF strategy emphasizes interventions that improve agricultural productivity, and expand markets and trade for agricultural commodities.<sup>[xi]</sup> To increase the effectiveness of the U.S. FTF investment, the U.S. Government decided to prioritize and concentrate efforts and resources on core “focus countries,” countries where the Five Rome Principles for Sustainable Food Security could best be realized in practice.<sup>[xii]</sup>

In June 2010, the Government of Bangladesh (GOB), in association with the UN Food and Agriculture Organization (FAO), published the Bangladesh Country Investment Plan (CIP) to serve as an instrument for resource mobilization and investment in the area of agriculture, food security and nutrition.<sup>[xiii]</sup> The CIP became a living document, formally aligned with the GOB Planning Commission's Sixth Five-Year Plan. The 2011-2015 CIP articulates broad strategies in 6 thematic areas: (i) agricultural growth, productivity and climate change; (ii) development of fisheries and livestock sectors; (iii) agricultural marketing, price stabilization, value chain and global/regional trade; (iv) income growth, social safety nets and public food distribution, (v) food utilization and nutrition security; and, (vi) cross cutting issues: gender and governance.

The GOB's strong commitment to the CIP helped secure the approval of a \$50 million Global Agriculture and Food Security Program (GAFSP), managed by the World Bank and the FAO. Numerous donor countries, including the United States, also made significant financial commitments to support the GOB's effort to implement the CIP. In total, the GOB and the international community committed more than \$25 billion over three years (\$7.7 billion in 2011, \$8.1 billion in 2012 and \$9.7 billion in 2013) to enhance agricultural productivity in Bangladesh through technology generation and adoption, as well as through improved water management.

### **The FTF Initiative in Bangladesh and the Role of the U.S. Department of Agriculture**

The U.S. FTF initiative is a multi-year strategy, whole-of-government approach led by the U.S. Agency for International Development (USAID) to address food security in support of partner country priorities. In Bangladesh, the FTF strategy is guided by the Bangladesh CIP, with a particular focus on the southern regions of the country.

The Foreign Agricultural Service (FAS) represents the U.S. Department of Agriculture (USDA) internationally, and is the lead agency in coordinating all Departmental matters with foreign countries.<sup>[xiv]</sup> On 4 April 1972, the United States formally recognized Bangladeshi independence, and a few months later FAS assigned Mr. Carl Winberg to serve as the first U.S. Agricultural Attaché in Dhaka. Early on, much of USDA's work in Bangladesh focused on food aid programs like P.L. 480 Title I (trade and development assistance, providing government-to-government sales of U.S. agricultural commodities on credit or grant terms) and Section 416(b) (overseas donations of surplus commodities acquired by the Commodity Credit Corporation, as authorized by the Agricultural Act of 1949). The Food for Progress Act of 1985 (FFP) marked an important shift in USDA support toward private sector-

led development, focusing particularly on improved agricultural production practices, infrastructure, marketing systems, farmer training, agro-processing, and agribusiness development. In 2002, FAS began to also administer the McGovern-Dole International Food for Education and Child Nutrition Program (FFE) to promote education, child development, and food security. USDA continues to strongly support FFE and FFP programs in Bangladesh, and is scaling up and aligning its resources to advance the objectives of the U.S. FTF strategy and the Bangladesh CIP. USDA has developed close partnerships with many organizations in Bangladesh, including: the World Food Program, the Bangladesh Academy of Sciences, the International Centre for Diarrhoeal Disease Research, Bangladesh, Winrock International, Land O'Lakes, the International Fertilizer Development Center, Cornell University and the Small Enterprise Assistance Funds.

USDA is also promoting technical and scientific exchanges within the Bangladeshi public and private sectors. Aside from the ongoing Borlaug and Cochran Fellowship Programs, the USDA FAS Office of Capacity Building and Development is partnering with the USAID Mission in Bangladesh to build technical capacity in the areas of agricultural statistics, agricultural market information, analysis and reporting, animal and plant health, and food safety. FAS collaborates with other agencies and institutions to provide resources and technical expertise to support these efforts. These include: the Animal Plant Health Inspection Service, the Agricultural Research Service, the Agricultural Marketing Service, the Economic Research Service, the National Agricultural Statistics Service, the National Institute of Food and Agriculture and the U.S. Food and Drug Administration. The U.S. Forest Service also provides technical cooperation on best management practices, improved forest assessments and other aspects of natural resource management and biodiversity conservation.

The U.S. FTF strategy emphasizes that “*non-governmental organizations (NGOs) and the private sector are particularly important for building momentum for combating food insecurity and increasing the sustainability of our efforts.*” The Bangladesh Country Investment Plan offers a blueprint for investment and trade. The FAS office in Dhaka welcomes inquiries from all interested stakeholders.

USDA Foreign Agricultural Service, U.S. Embassy Annex, Baridhara, Dhaka-1212, Bangladesh,

Tel: +88-02-8837155 Fax: +88-02-8820207

Email: [AgDhaka@fas.usda.gov](mailto:AgDhaka@fas.usda.gov) and [AgNewDelhi@fas.usda.gov](mailto:AgNewDelhi@fas.usda.gov)

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